



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,658	12/29/2006	Rudolf Schnekenburger	87305.1520	7603

30734 7590 03/04/2010
BAKER & HOSTETLER LLP
WASHINGTON SQUARE, SUITE 1100
1050 CONNECTICUT AVE. N.W.
WASHINGTON, DC 20036-5304

EXAMINER

MERLINO, ALYSON MARIE

ART UNIT	PAPER NUMBER
----------	--------------

3673

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/04/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No. 10/574,658	Applicant(s) SCHNEKENBURGER, RUDOLF	
	Examiner ALYSON M. MERLINO	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensor, the fire alarm, the actuator, the fire protection device, the lock, the latch, the handle socket, the bolt, the bolt drive, the status documentation means, the element of the device associated with the status documentation means, the adjustment device, the at least two elements of the adjustment device, the intumescent material linked to the elements, the fixing device, the at least two elements of the fixing device, the intumescent material linked to the elements of the fixing device, the adjustability of the two elements, the at least one bolt, the intumescent material linked to the at least one bolt, the movement of the bolt into the predefined position via the intumescent material, the intumescent material positioned on a rotation point, the intumescent material positioned on a free end of the adjustable element, the immobilizing system, smoke protection doors, smoke protection windows, fire protection flaps, smoke dispersal flaps, and the intumescent material actuating or triggering an immobilizing mechanism must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 3673

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because each instance of reference character 17 in Figure 2 should be changed to 17' in light of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

Art Unit: 3673

the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. **Claims 7, 8, 11, 12, 15-17, and 20 are objected to** because of the following informalities:

- a. In regards to claim 7, line 3, the phrase "the intumescent material" should be changed to "an intumescent material," and in line 4, the phrase "in such way" should be changed to "in such a way."
- b. In regards to claim 8, line 4, the phrase "in such way" should be changed to "in such a way."
- c. In regards to claim 11, line 4, each instance of the phrase "the bolt" should be changed to "the at least one bolt," and the phrase "in such way" should be changed to "in such a way."
- d. In regards to claim 12, line 4, each instance of the phrase "the bolt" should be changed to "the at least one bolt," and the phrase "in such way" should be changed to "in such a way," and in line 5, the phrase "lock or release" in parentheses should be removed.
- e. In regards to claim 15, line 4, and claim 16, line 4, the phrase "the starting state" should be changed to "a starting state."
- f. In regards to claim 17, line 4, the limitation "the free space in the starting state" should be changed to "a free space in a starting state."

Art Unit: 3673

g. In regards to claim 20, line 4, the phrase "the intumescent material" should be changed to "an intumescent material," and in lines 4 and 5, the phrase "the immobilizing mechanism" should be changed to "an immobilizing mechanism."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 1-20 are rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6. **In regards to claims 1-6**, the specification and drawings do not provide adequate support to describe to one of ordinary skill in the art how the intumescent material is utilized as a sensor or actuator of a fire alarm, as an actuator of a fire protection device, or as a status documentation means of an element of a device. The structure of the "device" recited in claims 1-6 is unclear in light of the specification. Also, the drawings fail to show the structure that applicant intends to claim in claims 1-6, therefore, the structure or device that applicant intends to claim in claims 1-6 is unclear and unsupported. For examination purposes, the claims will be given a broad interpretation until further clarification from applicant.

Art Unit: 3673

7. **In regards to claims 7-10 and 15-19**, the specification and drawings do not provide adequate support to describe to one of ordinary skill in the art what applicant considers as the adjustment device having the intumescent material or the fixing device having the intumescent material. The structure of these "devices" recited in claims 7-10 and 15-19 is unclear in light of the specification. Also, the drawings fail to show the structure that applicant intends to claim in claims 7-10 and 15-19, therefore, the structure or device that applicant intends to claim in claims 7-10 and 15-19 is unclear and unsupported. Furthermore, it is unclear how the intumescent material changes shape if no heat from a fire has been applied. For examination purposes, the claims will be given a broad interpretation until further clarification from applicant.

8. **In regards to claims 11, 12, and 14**, it is unclear whether the bolt or at least one bolt referred to in the claim language is equivalent to the pivot latch 11 shown in the drawings. If the at least one bolt is equivalent to the pivot latch, then there is no support in the specification and drawings that the intumescent material moves the bolt to a predefined position. As much as can be discerned from the specification, the expansion of the intumescent material holds the pivot latch in its locked position, the intumescent material does not move the latch. If the at least one bolt is not equivalent to the pivot latch, then there is no support in the specification and drawings to provide adequate description of the device to one of ordinary skill in the art as recited in the claims. Furthermore, it is unclear what applicant considers as the "current position" if the device recited in claim 11 is considered as the device depicted in the drawings. For

Art Unit: 3673

examination purposes, the claims will be given a broad interpretation until further clarification from applicant.

9. **In regards to claim 13**, the ability of the at least one armature and the latch, if applicant is considering the at least one armature as element 13 and the latch as element 11 in the drawings, to be "adjustable in relation to one another" is unsupported by the specification. Specifically, it is unclear whether applicant is intending to claim that the armature and latch are movable within the device, or that there is some other characteristic of the armature and latch or another component that allows the adjustability that is not supported by the specification. Furthermore, if the at least one armature is equivalent to element 13 in the figures, then it is also unclear how the device includes more than one armature since the specification and drawings only describe one armature 13. Moreover, there is no support in the specification and drawings that the intumescent material moves or changes the position of the armature or latch to a predefined position and the door opener to a predefined position. As much as can be discerned from the specification, the expansion of the intumescent material holds the pivot latch in its locked position, the intumescent material does not move or change the position of the latch, thus affecting the status of the door opener. Also, it is unclear to which component of the device depicted in the drawings applicant considers as the "at least one adjustable element." For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

10. **In regards to claim 20**, the specification and drawings do not provide adequate support to describe to one of ordinary skill in the art the structure of the immobilizing

Art Unit: 3673

system and how the intumescent material actuates or triggers an immobilizing mechanism. The structure of the "device" recited in the claim is unclear in light of the specification. Also, the drawings fail to show the structure that applicant intends to claim in claim 20, therefore, the structure or device that applicant intends to claim in claim 20 is unclear and unsupported. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 1-6 and 15-19 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. **Claims 1-6** provides for the use of an intumescent material, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed recitations of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Art Unit: 3673

14. **In regards to claim 6**, since claim 6 is dependent upon itself, for examination purposes, it will be considered dependent upon claim 5 until further clarification from applicant.

15. **In regards to claims 15 and 16**, as set forth in the rejection under 35 U.S.C. 112, first paragraph above, the device to which applicant refers in claims 15 and 16 is unclear in light of the specification and drawings. If one considers the door opener shown in the drawings as the "device," it is unclear how the intumescent material is positioned on a "rotation point" and on a "free end" of an adjustable element, when the drawings only show locating the intumescent material in various positions within the door opener, but not on a rotation point or free end. Furthermore, it is unclear whether the adjustable element is equivalent to one or more of the at least two elements recited in claim 7 or another component entirely. Moreover, it is unclear to which state of the device applicant considers as the starting state, if the device is considered as the door opener. For examination purposes, the claims will be given a broad interpretation until further clarification from applicant.

16. **In regards to claims 17-19**, as set forth in the rejection under 35 U.S.C. 112, first paragraph above, the device to which applicant refers in claims 17 and 18 is unclear in light of the specification and drawings. If one considers the door opener shown in the drawings as the "device," it is unclear how the intumescent material fills up a free space in the device housing in a "starting state." Specifically, it is unclear to which state of the device applicant considers as the starting state. If the device is considered as the door opener and the starting state is considered as the locked state

Art Unit: 3673

of the door opener when the intumescent material has not yet expanded, then it is unclear how the intumescent material fills the free space, when the space is only filled after heat from a fire has been applied, which does not seem to correspond to a "starting state." Also, it is unclear to which element of claim 7 applicant considers as the "element" recited in claim 18. For examination purposes, the claims will be given a broad interpretation until further clarification from applicant.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. **Claims 1, 2, 5, and 6 are rejected** under 35 U.S.C. 102(b) as being anticipated by Palmatier (US-5163516).

19. **In regards to claims 1 and 2**, Palmatier discloses a use of an intumescent material 21 as a sensor or an actuator of a fire alarm 30 (Col. 4, lines 25-28).

20. **In regards to claims 5 and 6**, Palmatier discloses a use of an intumescent material 21 as a status documentation means of a current status of an element 18 of a device in case of fire (flag 30 is pivoted to signal the fire, Col. 4, lines 25-28).

21. **Claims 3, 4, 7-12, and 14-20 are rejected** under 35 U.S.C. 102(b) as being anticipated by Saino (US-5380053).

22. **In regards to claim 3**, Saino discloses a use of an intumescent material 47 as an actuator of a fire protection device (apparent from Figure 4).

Art Unit: 3673

23. **In regards to claim 4**, Saino discloses that the fire protection device is a lock (Figure 4) and the intumescent material is operatively linked to at least one of the lock components (connected to latch 29, Figure 4).

24. **In regards to claims 7, 15, and 16**, Saino discloses an "adjustment device" in case of fire having at least two elements 29, 37, wherein an intumescent material 47 is operatively linked to at least one of the elements 29 in such a way that the intumescent material changes the relative position through its shape change (component 29 moves into component 37 when the intumescent material expands, Figure 4).

25. **In regards to claims 8 and 9**, Saino discloses a "fixing device" having at least two elements 29, 37, wherein an intumescent material 47 is operatively linked to at least one of the elements in such a way that the intumescent material fixes the relative position of the at least one of the elements through its shape change (position of component 29 is fixed in the position shown in Figure 4).

26. **In regards to claim 10**, Saino discloses that two elements 29, 37 movable in relation to one another are provided, with one element being movable 29 and the other element being fixed in position 37.

27. **In regards to claim 11**, Saino discloses a lock/release device (Figure 2) for use in a door 15 having at least one bolt 29, wherein an intumescent material 47 is operatively linked to the at least one bolt in such a way that the intumescent material fixes the at least one bolt in a "current" position through its shape change (fixes the at least one bolt in the position shown in Figure 4).

Art Unit: 3673

28. **In regards to claim 12**, Saino discloses a lock/release device (Figure 2) for use in a door 15 having at least one bolt 29, wherein an intumescent material 47 is operatively linked to the at least one bolt in such a way that the intumescent material "moves" the at least one bolt into a predefined position through its shape change (apparent from Figure 4).

29. **In regards to claim 14**, Saino discloses that the predefined position is a lock position (apparent from Figure 4).

30. **In regards to claim 17**, Saino discloses that the intumescent material is positioned inside a device housing 53 to fill up a free space (apparent from Figure 4).

31. **In regards to claims 18 and 19**, Saino discloses that the intumescent material is positioned, as at least one of the elements is fixed in position, on a housing wall 51 in proximity to the at least one of the elements (Figure 4), with the material being positioned in a recess (opening in housing to receive the material, apparent from Figures 2 and 4).

32. **In regards to claim 20**, Saino discloses an "immobilizing system" for fire protection, wherein an intumescent material 47 actuates an immobilizing mechanism (the movement of component 29 into component 37, Figure 4).

Claim Rejections - 35 USC § 103

33. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

34. **Claim 13 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Thomas (US-4867496) in view of Saino (US-5380053). Thomas discloses a lock/release device for use in a door opener (Figure 2) having an armature 12 and a latch 2, wherein a material 44 is positioned in such a way that its shape change fixes the position of the latch and thus maintains the door opener in a predefined position (Col. 5, lines 21-28). Thomas fails to disclose that the material is an intumescent material. Saino teaches the use of an intumescent material 47 within a latching device. Since replacing the material that expands as a result of heat, disclosed by Thomas, with an intumescent material that also expands would still allow the latch position to be fixed, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the material disclosed by Thomas with an intumescent material since both materials expand when subjected to heat.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner would like to note that the combination of Thomas (US-4867496) in view of Saino (US-5380053) as applied to claim 13 above, would support a rejection of claims 3 and 4 under 35 U.S.C. 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALYSON M. MERLINO whose telephone number is (571)272-2219. The examiner can normally be reached on Monday through Friday, 7:30 - 5:00.

Art Unit: 3673

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3673

AM
February 23, 2010